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# **The Child Dental Health Survey Queensland 1997**

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**AIHW Dental Statistics and Research Unit  
The University of Adelaide**

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The Australian Institute of Health and Welfare (AIHW) is an independent health and welfare statistics and information agency in the Commonwealth Health and Family Services portfolio. The Institute's mission is to inform community discussion and decision making through national leadership in the development and provision of authoritative and timely information on the health and welfare of Australians.

The AIHW Dental Statistics and Research Unit (DSRU) is a collaborative unit of the AIHW established in 1988 at The University of Adelaide. The DSRU aims to improve the oral health of Australians through the collection, analysis and reporting of dental statistics and research on the dental health status, dental practices and the use of dental services, and the dental labour force.

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# Contents

Background to the Child Dental Health Survey .....	1
Scope and aims of the Survey .....	1
Survey methods .....	1
Data items .....	2
Analyses .....	2
Purpose of this report .....	3
Source of subjects and sampling .....	3
Demographic composition of the sample .....	4
Country of birth (including Indigenous status) .....	5
Deciduous teeth: age-specific caries experience .....	6
Permanent teeth: age-specific experience .....	7
All teeth: age-specific experience .....	8
Fissure sealants: age-specific experience .....	9
Immediate treatment needs .....	9
School Dental Service examinations .....	10
Percentage of children with dmft=0, DMFT=0 and d+D=4+ .....	11
References .....	13

# Tables

Table 1: Number of children sampled and sampling procedure by region.....	4
Table 2: Demographic composition of the sample .....	5
Table 3: Country of birth (including Indigenous status) .....	6
Table 4: Deciduous teeth: age-specific experience.....	6
Table 5: Permanent teeth: age-specific caries experience .....	7
Table 6: All teeth: age-specific experience .....	8
Table 7: Fissure sealants: age-specific experience.....	9

Table 8: Immediate treatment needs: age-specific distribution.....	10
Table 9: School Dental Service examinations: age-specific distribution.....	10
Table 10: School Dental Service examinations: time since last visit.....	11

## Figures

Figure 1: Percentage of children with dmft=0, DMFT=0 and d+D=4+ .....	12
Figure 2: Time since last dental examination .....	12

## Abbreviations

d – deciduous decayed teeth

m – deciduous missing teeth

f – deciduous filled teeth

dmft – deciduous decayed, missing and filled teeth

D – permanent decayed teeth

M – permanent missing teeth

F – permanent filled teeth

DMFT – permanent decayed, missing and filled teeth

SD – standard deviation

# Background to the Child Dental Health Survey

The Child Dental Health Survey, originally established in 1977 by the (then) Commonwealth Department of Health, is intended to provide time-series data for the purpose of monitoring the dental health status of primary school children. The establishment of the Survey coincided with the development of the Australian School Dental Scheme (ASDS), a government-funded program providing dental care for school children. Implicit within the original goals of the Child Dental Health Survey was the collection of routine data from among all patients of the ASDS which was administered through each of the State and Territory health authorities. There was no attempt to obtain information about those students not enrolled in the ASDS. From the inception of the Survey, data have been collected by School Dental Service staff.

The survey has been maintained annually since 1977. Following some changes to the survey procedures by individual State and Territory health authorities (principally in the methods of sampling, but also including some alterations to data items) a redesigned Survey was developed in 1988. At that time responsibility for the management and processing of the Survey was passed to Dental Statistics and Research Unit (DSRU), an external unit of the Australian Institute of Health and Welfare. In the process of transferring responsibility for the Survey, State and Territory health authorities were encouraged to adopt some limited changes to the types of data collected and to move towards sampling of a proportion of children. Those changes were adopted uniformly by the end of 1991.

## Scope and aims of the Survey

The redesigned Child Dental Health Survey provides dental health data concerning the population of persons enrolled in School Dental Services throughout the States and Territories. There are four aims of the Survey.

1. To maintain the national time-series of statistics providing annual estimates of children's dental health status in Australian States and Territories.
2. To examine temporal changes in caries experience among Australian children.
3. To examine the distribution of dental health status by geographic location and demographic factors.
4. To identify high risk groups according to geographic location and demographic status.

## Survey methods

Data for the Child Dental Health Survey were collected during the 1997 calendar year from a sample of patients of the Queensland School Dental Service by dental therapists and dentists. They transcribed data items from routine clinical records on to Optical Mark Reader data sheets which were processed and edited.

Processing and editing of all data forms was performed by the AIHW Dental Statistics and Research Unit. Unit record data were forwarded to the DSRU in Adelaide for processing and analysis. Analyses were undertaken to compute summary statistics describing caries experience, frequency of fissure sealants, immediate treatment needs and children's history of School Dental Service examinations among age groups.

## Data items

Demographic and service provision data items include the child's age, sex and the date of the current and previous examination. Provision was made for recording country of birth and the indigenous status of each child and mother.

Dental health status data items include a count of the number of teeth which were decayed, missing (because of dental caries) or filled (because of dental caries). Separate counts were made of deciduous and permanent teeth. A count of the number of permanent teeth with fissure sealants (and which were not decayed or filled) was also made. An additional data item was marked to indicate if the child had a need for immediate treatment, defined as the presence of oral pain or infection, or the likely occurrence of oral pain or infection within four weeks. This would include children requiring treatment for existing pain, dental abscesses, grossly decayed teeth with pulp exposure, avulsed or fractured teeth, or life threatening conditions. All indices follow recommendations made by the World Health Organization (1987) and by Palmer et al. (1984) concerning epidemiological recording of dental conditions.

A survey guide was previously issued to all clinics explaining the conventions for data recording. However, there were no formal procedures for training or calibration in the clinical procedures for detection of caries experience. Instead, clinical staff used their own clinical judgement when making decisions about the presence or absence of decayed, missing, filled or fissure sealed teeth.

## Analyses

Data were analysed to provide age-specific means and percentages for each dental health index and for periodicity of examinations. Standard deviations were computed for all means. The level of statistical precision for all age-specific estimates was assessed by computing the relative standard error (that is, standard error of the estimate divided by the estimate, expressed as a percentage). Estimates with relative standard errors exceeded 40 per cent are marked with an asterisk. These estimates are statistically unreliable and should be interpreted with caution.

A further aspect of the analysis was the weighting of unit records to reflect the sampling procedure. This was necessary because children were sampled using different probabilities of selection. The probability was 1.0 (i.e., selected by full enumeration) for children with an unknown date of birth throughout the state. Elsewhere the probability was approximately 0.066 (*ie* equivalent to the ratio of 1:15) for students sampled according to the intended procedure and approximately 0.2 for students sampled on the basis of dates of birth falling between the 1<sup>st</sup> and 6<sup>th</sup> of any month (i.e., equivalent to the ratio of 1:5). Hence, the weighting process considered the number of students sampled ( $n_i$ ) and the number of children in the population (assuming accurate sampling,  $N_i = n_i / [\text{sampling probability}]$ ) for each sampling strata. Stratum specific weights,  $w_i$ , which could be applied to unit record data were computed to avoid inflating the sample size. The following formula was used:

$$w_i = \frac{N_i / n_i}{\sum N_i / \sum n_i}$$

Unit record weights were applied to all statistics computed for Tables 2 to 8.

## **Purpose of this report**

This report is part of the annual series providing descriptive statistics concerning child dental health in Queensland. The report contains tables and figures. Information listed in the tables includes: the age and sex of children in the sample, their deciduous and permanent caries experience, frequency of fissure sealants, immediate treatment needs and history of school dental service examinations. The figures combine and summarise information from four of the tables.

The following sections briefly describe the data in each table and provide a simple, summary statement highlighting differences between the 1996 and 1997 findings. However, no formal hypothesis tests have been undertaken, and descriptions of differences between years are intended as a guide to the reader rather than a formal evaluation of trends.

## **Source of subjects and sampling**

It was intended that children throughout Queensland would be sampled at a ratio of approximately 1:15 by selecting those whose date of birth was on either the first or the sixth day of any month. This is an alteration of the sampling frame from 1995 where children were selected if their date of birth fell on any of the first six days of a month. All children with an unknown date of birth were also sampled. Sampling occurred at the time of routine clinical examinations prior to the commencement of any course of care.

The outcome of sampling varied widely across Queensland regions and within regions varied by clinics. The number of children sampled in each region and the sampling procedure predominantly used are given in Table 1. While most regions utilised the intended sampling procedure two regions sampled all children with dates of birth between the 1<sup>st</sup> and 6<sup>th</sup> of any month. Overall, 81.8% of the children were sampled on the basis of them having been born on the 1<sup>st</sup> or 6<sup>th</sup> of the month while 18.2% were sampled due to them having birthdays between the 1<sup>st</sup> and 6<sup>th</sup> of any month.

As can be seen, the bulk of the children came from the Brisbane North, Brisbane South, Central, Darling Downs, Northern and Sunshine Coast regions. There were few children sampled from the Central West, Peninsula/Torres Strait, South Coast, South West and Wide Bay regions.

### **Changes since 1996**

There were appreciable changes in the number of students sampled across regions between 1996 and 1997. Considerable reductions in the number of children sampled occurred in the Darling Downs, Mackay and Wide Bay regions with these generally resulting from changes in the intended sampling ratios for these regions. Increases occurred in the number of children sampled in the Brisbane North, Brisbane South, Central and Northern regions. As a percentage of the total sample, students from Brisbane (North and South) comprised 40.6% in 1997 compared to 25.0% in 1996.

**Table 1. Number of children sampled and sampling procedure by region**

Region	<i>n</i>	Sampling procedure	Per cent sampled at most common sampling procedure	Most common sampling ratio
Brisbane North	1,292	1 and 6	98.5	1 : 15
Brisbane South	2,286	1 – 6	66.6	1 : 5
Central	736	1 and 6	100.0	1 : 15
Central West	1	?	?	?
Darling Downs	966	1 and 6	99.5	1 : 15
Mackay	465	1 and 6	99.4	1 : 15
Northern	826	1 and 6	99.2	1 : 15
Peninsula/Torres Strait	0	–	–	–
South Coast	10	1 and 6	80.0	1 : 15
South West	45	1 and 6	100.0	1 : 15
Sunshine Coast	1,063	1 and 6	96.4	1 : 15
West Moreton	437	1 and 6	88.8	1 : 15
Wide Bay	66	1 – 6	50.0	1 : 5
Unknown	611	1 and 6	60.0	1 : 15

## Demographic composition of the sample

A total number of 8,788 children were sampled during 1997 (see Table 2). The majority of children in the complete sample were aged between 5 and 15 years inclusive (97.4%). There were very small numbers of children aged less than 4 or greater than 15 years. In the weighted distribution males were represented in slightly smaller numbers ( $n = 4,358$ ) than females ( $n = 4,439$ ). There was little difference between the average age of males (mean = 9.15) and that of females (mean = 9.12).

The age distribution of the sample reflects the age range of school children who are the principal target group of the Queensland School Dental Service. The small numbers of children aged 4 years or less and 15 years or more results in less reliability of computed statistics for those ages. Furthermore, children in those ages are outside the main target group of the School Dental Service and it is likely that they have some special characteristics which make them less representative of their respective age groups within the Queensland population.

### Changes since 1996

The total number of children in the weighted sample in 1997 was 1,224 cases more than for 1996. In other respects the percentage age and sex distribution did not change substantially in 1997.



**Table 2. Demographic composition of the sample**

Age (years)	Known date of birth			Age only known			Weighted no. of children		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>
3	1	3	4	0	0	0	1	3	5
4	93	81	174	0	0	0	96	87	183
5	399	419	814	0	3	3	399	423	822
6	497	528	1,025	2	2	4	515	538	1,053
7	515	534	1,049	2	1	3	518	544	1,063
8	444	493	937	0	1	1	448	503	950
9	425	439	865	0	0	0	437	438	876
10	436	436	873	0	0	0	429	431	860
11	440	454	896	1	1	2	444	435	881
12	426	431	858	2	0	2	422	420	843
13	279	262	541	0	0	0	280	256	537
14	236	220	457	0	0	0	236	208	445
15	107	136	243	0	0	0	107	128	235
16	18	18	36	1	0	1	21	19	40
17	5	5	10	0	0	0	6	5	11
18	0	1	1	0	0	0	0	1	1
<b>Total</b>	<b>4,321</b>	<b>4,460</b>	<b>8,788</b>	<b>8</b>	<b>8</b>	<b>16</b>	<b>4,358</b>	<b>4,439</b>	<b>8,804</b>

## Country of birth (including Indigenous status)

As shown in Table 3, the birthplace/Indigenous status of 74.1% of children was recorded as not known. Australian-born (non-Indigenous) children represented 94.4% of the remainder of the sample (25.1% of the total sample). Students identified as Australian-born Indigenous comprised 0.4% of the total sample. Only small numbers of children were identified as being born outside of Australia.

Due to the small amount of known information concerning the birthplace/Indigenous status of the childrens' mothers (valid data on only 11.4% of mothers) these results have been omitted from this report.

### Changes since 1996

There has been a halving of the percentage of Indigenous children sampled between 1996 and 1997, from 0.8% to 0.4% of the total sample.

**Table 3. Country of birth (including Indigenous status)**

Birthplace (Indigenous Status)	Frequency	Per cent	Valid per cent
	<i>n</i>	%	%
Australia (non-Indigenous)	2,085	23.7	23.9
Australia (Indigenous)	32	0.4	0.4
Australia (Torres Strait Islander)	22	0.2	0.2
United Kingdom and Ireland	17	0.2	0.2
Other English Speaking	16	0.2	0.2
European	2	0.0	0.0
Middle East (West Asia)	0	0.0	0.0
South East Asia	11	0.1	0.1
Other Asia	10	0.1	0.1
Other	13	0.1	0.1
Not known	6,527	74.1	74.6
Missing	69	0.8	
<b>Total</b>	<b>8,804</b>	<b>100.0</b>	<b>100.0</b>

## Deciduous teeth: age-specific caries experience

Table 4 shows that the mean number of clinically decayed teeth among children aged up to 10 years old declined consistently across older age groups, from 1.22 for students aged 5 years of age to 0.44 for 10-year-old students. In contrast, mean dmft scores increased from 1.32 for children up to 4 years of age to 2.30 for 8-year-olds before declining to 1.84 for 10-year-olds. The percentage of dmft accounted for by clinically decayed teeth declined steadily across older age groups, from 84.5% for children aged up to and including 4 years of age to 25.3% for 10-year-olds. The percentage of children free of clinical caries (dmft=0) ranged from a high of 68.8% among children up to 4 years old to a low of 43.7% among 9-year-olds.

Together these distributions suggest that the caries experience of younger children, probably presenting for the first time to the School Dental Service, is mostly represented by untreated decay, and that this is managed in later years to achieve a relatively low frequency of untreated decay.

**Table 4. Deciduous teeth: age-specific experience**

Age	Students	Decayed		dmft		d/dmft	Children with dmft=0
		mean	SD	mean	SD		
	<i>n</i>					%	%
3-4	187	1.12	2.47	1.32	2.68	84.5	68.8
5	822	1.22	2.31	1.71	2.91	75.0	56.6
6	1053	1.08	1.96	1.97	2.98	59.4	51.8
7	1063	0.83	1.44	2.18	2.89	45.0	44.8
8	950	0.62	1.18	2.30	2.85	30.8	44.8
9	876	0.54	0.99	2.14	2.63	30.5	43.7
10	860	0.44	0.96	1.86	2.46	25.3	46.7

## Changes since 1996

Changes in mean number of decayed and dmft teeth between 1996 and 1997 were small with the only major differences being found for caries experience in the youngest age group. Children up to the age of 4 had lower levels of clinically detectable decay in 1997, considerably lower dmft (35.9% lower in 1997 than reported in 1996) and a higher percentage of children with dmft=0.

## Permanent teeth: age-specific experience

The mean number of clinically decayed and DMF teeth increased with increasing age (see Table 5). Detectable decay ranged from 0.02 among the youngest children up to 0.85 for children aged 16 to 18 years old. DMFT scores ranged from 0.03 among 5-year-olds to 2.51 for 16–18-year-olds. The mean DMFT score for 12-year-old students was 1.15. Among students aged 11 to 15 years, the age-associated increase in mean DMFT was greater than the pattern observed for the younger half of the age range. This suggests either that caries activity accelerates after the age of 10, or that these older children represent a cohort with a higher historical caries experience. However, this trend is also affected by the increasing number of permanent teeth at risk, and increasing years at risk, which occur with increasing age.

The percentage of children free of clinically detectable caries in the permanent dentition (DMFT=0) declined substantially across older age groups. It is noteworthy that for age groups up to 12 years, more than 55% of children in any age group were free of clinical caries (DMFT=0). The percentage of DMFT present as untreated decay (D/DMFT) decreased from 83.7% for 5-year-olds to a low of 24.7% for 15-year-olds.

## Changes since 1996

There were few changes in either clinically detectable decay or DMFT scores between 1996 and 1997. However, there were variable changes in the percentage of DMFT expressed as decay, with some age groups showing an increase and some a decrease. There were also small some increases for students aged 12 to 15 years old in the percentage DMFT=0.

**Table 5. Permanent teeth: age-specific caries experience**

Age	Students <i>n</i>	Decayed		DMFT		D/DMFT %	Children with DMFT=0 %
		mean	SD	mean	SD		
5	822	0.02	0.19	0.03	0.26	74.0	98.8
6	1053	0.07	0.33	0.11	0.93	83.7	94.4
7	1063	0.15	0.54	0.28	1.26	69.5	87.3
8	950	0.22	0.61	0.41	1.22	59.3	78.9
9	876	0.19	0.57	0.55	1.42	36.8	72.2
10	860	0.25	0.66	0.64	1.18	39.6	67.0
11	881	0.29	0.68	0.84	1.39	37.0	61.1
12	843	0.39	0.96	1.15	1.84	33.7	55.9
13	537	0.56	1.20	1.64	2.27	31.0	46.1
14	445	0.59	1.60	1.85	2.51	30.3	41.2
15	235	0.62	1.32	2.40	2.97	24.7	35.2
16–18	52	0.85	1.77	2.51	3.07	26.8	33.8

## All teeth: age-specific experience

Untreated clinical decay in the combined deciduous and permanent dentitions (d+D=1, 2, 3 or 4+) existed for between 26.8% and 41.8% of the sample (see Table 6). The greatest likelihood of untreated decay occurred for 7-year-old students where 41.8% had d+D of one or more. The most extensive levels of untreated clinical decay (d+D=4 or more) occurred in the youngest children with the percentage of children with d+D=4+ decreasing with increasing age of the students.

More than 96 per cent of students aged up to 12 years had no deciduous or permanent teeth missing due to caries. However, smaller percentages avoided having fillings, and this was associated with age. An increase in the percentage of children presenting with fillings was seen up to the age of 10, a decline occurred to the age of 12, followed by a subsequent increase. The oldest children had the most fillings with 61.0% of 16–18-year-olds having at least one filling present.

There was a reasonably consistent decline in the percentage of children with no clinical caries experience in either deciduous or permanent dentition (dmft+DMFT=0), from 68.8% of children up to the age of 4 to 27.2% of those aged 16 years and older. The percentage fluctuated between about 35–45% among students aged 7–14 years old.

### Changes since 1996

There were no substantial changes in the percentages of children with clinically detectable decay between 1996 and 1997 for children in the key age groups of 5 to 12 years. However, small increases in the percentage d+D=0 can be seen in students aged over 13 years of age. There is also evidence of an increase in the percentage of the children with f+F=0 for some age groups. This has also produced an increase in the percentage of children in these age groups with no caries experience in either dentition (dmft+DMFT=0).

**Table 6. All teeth: age-specific experience**

Age	Students <i>n</i>	d+D=					m+M=0	f+F=0	dmft+DMFT=0
		0	1	2	3	4+			
		%	%	%	%	%	%	%	
3–4	187	72.5	5.9	4.0	4.3	13.4	98.6	93.9	68.8
5	822	62.0	10.9	9.5	5.3	12.3	98.4	84.5	55.9
6	1053	60.2	13.3	9.7	5.9	10.8	96.3	73.4	50.5
7	1062	58.2	17.1	11.4	5.3	8.0	96.4	60.5	42.4
8	950	62.6	16.8	8.9	5.1	6.6	96.7	50.0	38.7
9	876	61.7	19.1	11.3	4.4	3.5	96.2	47.1	35.7
10	860	65.9	16.0	9.9	4.2	4.0	98.1	45.9	36.2
11	881	68.9	17.7	8.4	3.1	2.0	97.1	53.5	43.3
12	843	73.2	15.0	5.4	3.4	3.0	98.1	55.5	45.4
13	533	71.4	13.7	8.0	3.1	3.8	97.7	52.1	42.5
14	444	71.3	15.1	6.9	3.8	2.9	96.7	51.1	38.5
15	235	68.5	15.7	9.4	2.1*	4.4	98.2	40.9	33.3
16–18	52	66.2	11.0	6.6*	6.6*	9.6*	92.6	39.0	27.2

**Table 7. Fissure sealants: age-specific experience**

Age	Students <i>n</i>	No. of sealants		Students with sealants			
		mean	SD	DMFT=0		DMFT≥1	
				<i>n</i>	%	<i>n</i>	%
6	1,053	0.08	0.49	994	2.4	59	15.4
7	1,062	0.37	1.01	928	12.1	134	24.4
8	950	0.58	1.23	750	20.9	201	25.3
9	876	0.69	1.31	633	25.3	243	30.1
10	859	0.66	1.28	55	24.2	284	26.9
11	880	0.57	1.19	538	20.6	342	29.7
12	843	0.71	1.79	471	22.2	371	29.7
13	532	0.66	1.32	248	19.8	284	30.7
14	444	0.85	1.67	183	24.0	261	31.6
15	235	0.77	1.65	83	23.4	152	33.7
16+	52	0.82	1.63	17	26.1	34	30.0

## Fissure sealants: age-specific experience

The mean number of fissure sealants per student (see Table 7) shows a bimodal distribution, peaking for 9 and 14 year-olds. Children with some clinical caries experience (DMFT=1+) were more likely to have fissure sealants than those with no clinical caries experience (DMFT=0) across all age groups. This is consistent with the targeting of sealants to children with greater disease experience.

### Changes since 1996

The mean number of fissure sealants was substantially higher in 1997 than in 1996 with increases ranging between 9.5% and 61.4% for students aged 7 years and older. The percentage of students with fissure sealants who had a DMFT=0 was generally higher in 1997 than in 1996 as was the percentage of older children with fissure sealants who had a dmft≥1.

## Immediate treatment needs

As can be seen from Table 8, immediate treatment needs were observed for between 9% and 12% of children aged 5–12 years. These children had a higher mean dmft and mean DMFT and, for most age groups, a higher percentage with 4 or more decayed teeth in comparison with the overall sample. These patterns of caries experience support the view that caries constitutes a substantial burden of disease for this small minority of children, and that it presumably contributes to immediate needs for treatment of pain or infection.

### Changes since 1996

The percentage of children with immediate treatment needs more than doubled since 1996. However, compared to 1996, mean dmft and DMFT scores were substantially lower in 1997, almost halving across this period. Reflecting this change, there was an appreciable reduction in the percentage of children with d+D=4+ between 1996 and 1997.

**Table 8: Immediate treatment needs: age-specific distribution**

Age (yrs)	Children in need of immediate treatment											
	Children		d+D=									
	<i>n</i>	<i>n</i>	%	dmft		DMFT		1	2	3	4	5+
			Mean	SD	Mean	SD	%	%	%	%	%	
5	822	91	11.3	2.45	3.57	0.01*	0.11*	11.6	14.1	8.3	5.4*	14.5
6	1053	122	11.8	2.67	3.66	0.10*	0.51*	15.2	14.0	8.1	1.9*	10.2
7	1063	118	11.4	2.75	3.43	0.19	0.68	18.5	12.7	8.9	10.8	6.7
8	950	94	10.1	2.44	2.99	0.45	0.94	17.7	7.2	6.0	3.6*	10.8
9	876	85	9.8	2.33	2.67	0.63	1.26	16.1	17.5	2.7*	0.0	1.3*
10	860	83	9.9	2.03	2.53	0.75	1.19	25.1	5.5*	4.6*	1.4*	2.7*
11	881	84	9.7	1.65	2.57	1.23	1.52	18.9	8.1	2.7*	2.7*	2.7*
12	843	90	10.8	0.68	1.88	1.52	2.44	20.3	8.0	3.8*	3.8*	2.5*
13	537	69	13.6	0.36	1.10	1.30	1.58	19.5	6.3*	1.6*	1.6*	1.6*
14	445	49	11.5	0.09*	0.29*	1.95	2.46	11.3	2.3*	6.8*	0.0	6.0*
15	235	24	10.2	0.05*	0.22*	2.71	4.14	23.8	9.5*	0.0	0.0	9.5*
16-18	52	7	14.0	-	-	1.33*	2.31*	0.0	0.0	0.0	0.0	16.7*

## School Dental Service examinations

Table 9 refers to the total number of examinations for children during 1997. The percentage of children with no previous examination in the School Dental Service was greatest among those up to 4 years of age and reduced to 4% or less for children aged more than 7 years of age. The inverse of this pattern can be seen for the percentage of children with a previous examination, although relatively greater percentages of younger children had an unknown previous examination status.

**Table 9: School Dental Service examinations: age-specific distribution**

Age	Students examined	Previous examination in School Dental Service		
		No	Yes	Unknown
	<i>n</i>	%	%	%
3-4	193	61.5	8.3	30.2
5	846	47.3	22.4	30.3
6	1100	17.8	53.1	29.2
7	1103	5.7	75.0	19.3
8	992	2.2	80.9	16.9
9	917	3.0	81.0	16.1
10	917	2.3	82.5	15.2
11	914	2.0	84.1	13.9
12	896	1.8	74.0	24.2
13	556	3.1	72.1	24.8
14	452	2.3	76.5	21.2
15	244	1.9*	79.4	18.7
16-18	53	0.0	63.3	36.7

**Table 10: School Dental Service examinations: time since last visit**

Age	Students	Months since last visit				mean	SD
		0-6	7-12	13-24	25+		
	<i>n</i>	%	%	%	%		
3-4	4	0.0	72.7	27.3*	0.0	12.45	2.78
5	150	5.5	58.2	35.6	0.8*	12.15	4.47
6	556	4.3	47.4	46.2	2.1	13.41	6.42
7	798	2.4	35.6	58.5	3.4	16.52	5.73
8	774	1.8	34.9	56.4	6.9	15.67	7.39
9	719	2.5	33.0	58.5	6.0	15.26	5.48
10	722	1.2	37.3	54.3	7.3	15.58	6.89
11	744	1.4	32.5	58.9	7.2	16.06	8.56
12	631	7.9	36.3	47.5	8.4	14.58	7.40
13	386	9.2	33.2	48.3	9.4	15.14	8.55
14	341	3.2	39.2	49.8	7.8	14.95	6.48
15	190	0.8*	24.6	65.6	9.0	16.12	7.20
16-18	32	0.0	10.6*	68.2	21.2	18.96	6.33

Among children with a previous examination (see Table 10) approximately one-half within most ages had received examinations within a period of 13-24 months. A re-examination interval of 7-12 months occurred for most of the remaining children being most frequent for the youngest children and occurring for between 32% and 40% of 7-14-year-olds. Very few children had been examined either in the previous six months or longer than two years previously.

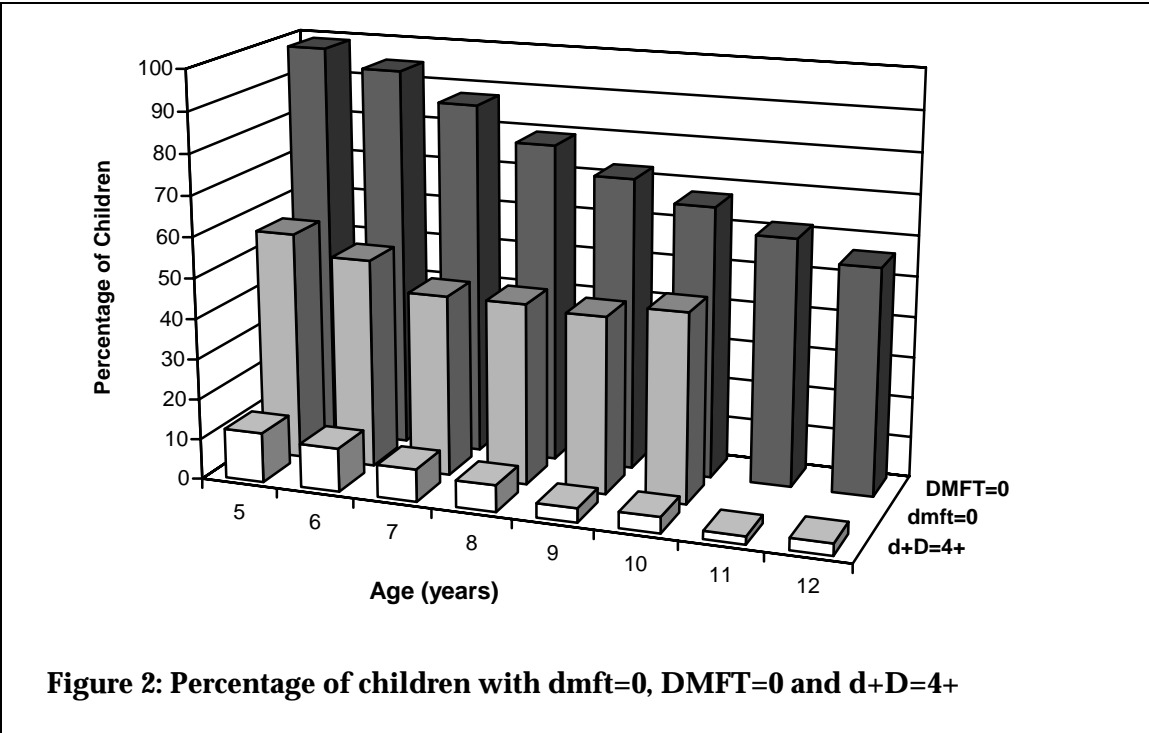
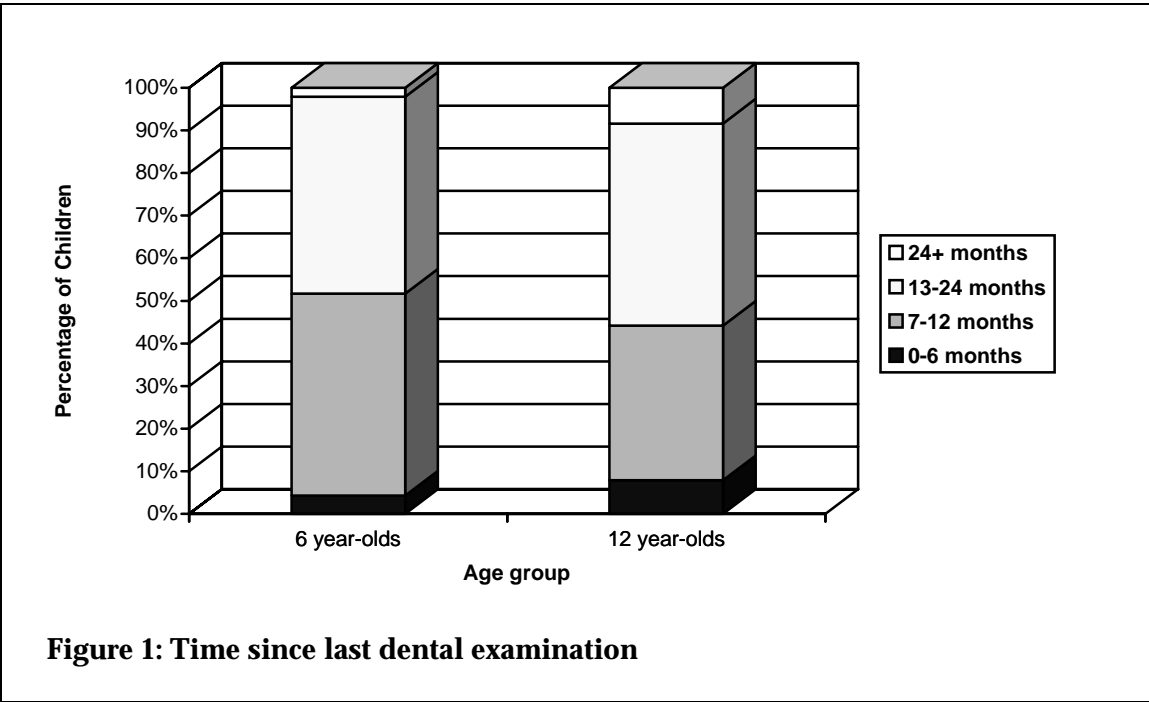
Figure 1 presents graphically time since last visit for 6- and 12-year-old children. A greater percentage of 6-year-olds had had an exam within the previous 12 months (51.7%) than did 12-year-olds (44.2%).

### Changes since 1996

There was a consistent trend for children up to the age of 12 years for lower percentages of children to have had their most recent exam between 13 and 24 months previously, with a corresponding increase in the percentages having had their last exam within 7-12 months previously.

## Percentage of children with dmft=0, DMFT=0 and d+D=4+

Figure 2 presents data contained in Tables 4, 5 and 6 to summarise the extent of dental health (represented by percentage with no clinical caries experience) and the extent of more extensive untreated decay (represented by the percentage with d+D=4 or more).





## References

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World Health Organization. *Oral Health Surveys. Basic Methods*. 3rd Edition. WHO; Geneva, 1987.